

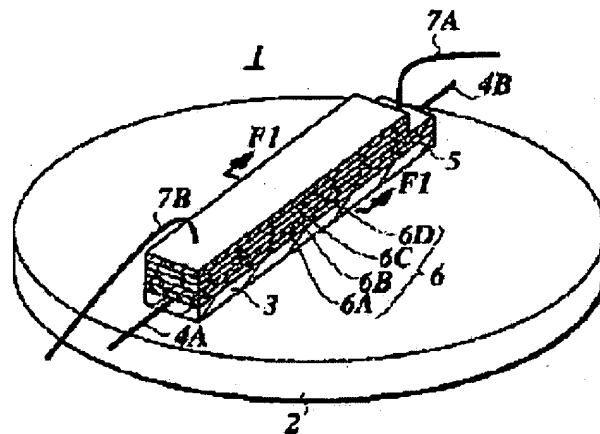
# **SUPERCONDUCTING SWITCH, AND SWITCHING METHOD OF SUPERCONDUCTING DEVICE AND SUPERCONDUCTING SWITCH**

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**Classification:**  
 - international: H01L39/16; H01L39/00; H01L39/24  
 - european:  
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**Priority number(s):**

## **Abstract of JP2001332775**

**PROBLEM TO BE SOLVED:** To provide a superconducting switch and switching method of a superconducting device and a superconducting switch capable of reducing power consumption and realizing high speed operation.

**SOLUTION:** The superconducting switch 1 comprises a light emitting section 6 and a superconducting section 3 for varying superconducting transition temperature  $T_c$  by on and off of light irradiation of the light emitting section 6. For example, alternately laminated Si thin films and W thin films are used for the superconductor 3. An organic EL element is used for the light emitting section 6. The superconducting device comprises a superconducting magnet, a power supply for supplying power to the superconducting magnet, and the superconducting switch 1 for short-circuiting the superconducting magnet.



- |    |         |
|----|---------|
| 1  | 超電導スイッチ |
| 2  | 基板      |
| 3  | 超電導体    |
| 4A | 第1の超電導線 |
| 4B | 第2の超電導線 |
| 5  | 透明絶縁体   |
| 6  | 発光体     |
| 6A | 第1の電極   |
| 6B | 正孔輸送層   |
| 6C | 電子輸送層   |
| 6D | 第2の電極   |
| 7A | 第1の導線   |
| 7B | 第2の導線   |

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